REMARKS

As a result of the forgoing amendment, a typographical error in Claim 60 has been corrected thereby obviating the rejection under the second paragraph of 35 U.S.C. 112. Accordingly, this rejection should be withdrawn. New claim 71 has been added to recite a specific embodiment of the invention.

Reconsideration and withdrawal of the rejection of Claims 60-62 and 64 as unpatentable under the Pommier et al '378 reference in view of the Haas et al. '049 reference are requested. The examiner asserts that Pommier et al shows the production of a packing paper by binding long and short fibers and talc and pressing the mixture. The examiner asserts that the reference does not show the application of a coating to the pressed product. The examiner then relies on the Haas et al. as teaching the use of cellulose acetate coatings on shaped articles as water-repellent coatings and contends that it would be obvious to use the water-repellent coatings of Haas et al. to coat the pressed paper products of Pommier et al. in order to make them suitable for containing moist foods. The examiner states that the motivation to employ the Haas et al. cellulosic coatings is found at column 11 of that patent. However, it is submitted that this is not an accurate characterization of these references, particularly, in the context of the present invention.

The present claims call for a process for producing a substantially completely biodegradable molded body which is useful for packaging by first preparing a viscous mixed of the recited fiber materials, placing the mixture into a mold, heating the mixture in the mold to bake the mixture into a cohesive mass

having the desired shape and then applying a biodegradable hydrophobic softener-free liquid impenetrable boundary layer to the thus obtained shaped cohesive mass. Pommier et al. is not directed to the preparation of a molded body which is useful for packaging. Rather, Pommier et al. is directed solely to a packing paper such as those used in various types packing, for example, carrier boxes (col. 1, lines 20-24) which can be printed. It is this specific aspect of the paper that Pommier et al. deals with. Thus, it is Pommier et al.'s purpose to produce a paper which has a good surface state, a good capacity for printing and low mechanical properties while having a white color (col. 1, lines 47-50).

Pommier et al. accomplish this by providing a paper which is composed firstly of a support layer obtained from unbleached and/or bleached cellulose fibers which may or may not be recycled and a coating layer thereon with a mineral content which gives the paper a white pigmentation of between 25 and 50 percent by weight of dry matter and a long and/or short white cellulose fibers. In other words, this reference is directed towards obtaining a paper which has specific printable characteristics. In order to obtain this, a very specific coating is applied to the paper.

In addition, this paper product of Pommier et al. is not molded. Rather as pointed out at col. 3, lines 12-17, the paper is prepared by pouring it on to a manufacturing canvas i.e., a screen in the usual paper manufacturing method. This is not a molded and baking process as required by the present claim.

Moreover, in light of the very specific purpose of obtaining a given surface coating which is properly printable, one skilled in the art would have no

reason to substitute some coating layer other than that one specifically suggested by Pommier et al. since that is the crux of the Pommier et al. invention.

The Haas et al. reference relates to a method for providing a water repellent and/or water proof coating to one side or an inside of a shaped element. Haas et al. says absolutely nothing about obtaining a printable coating. Moreover, Haas et al. does not discriminate in any way between hydrophobic or non-hydrophobic coatings. Certainly, Haas et al. gives no information to one skilled in the art that one could or should use a hydrophobic coating for any reason, much less, for the purpose of producing a product as is obtained with the presently claimed invention.

In addition, Haas et al. provides for the use of any number of products which would not be biodegradable e.g., siloxane release agents, binders, such as, synthetic polymers e.g., polyvinyl alcohols, polyacrylates and the like.

Pommier et al. on the other hand has absolutely no concern with the production of biodegradable product. In fact, Pommier also suggests the use of materials e.g., fibers, which are not biodegradable and therefor would not allow the product to be substantially completely biodegradable (see col. 2, lines 56-67 of the reference). Accordingly, one skilled in the art certainly would find no reason to substitute or use the water proof coating of Haas et al; on the paper product of Pommier et al. particularly since the surface characteristics of the Pommier et al. product are so crucial to the invention as described. Indeed, the skilled artisan would be reluctant to substitutes any coating on to the Pommier et al. paper because

in light of the required printable characteristics. Accordingly, the attempted combination of these references is improper and the rejection thereon is unpatentable and should be withdrawn.

The rejection of Claims 60 to 63 as being unpatentable over Pommier et al. in view of Karas et al. is also requested.

As advanced hereinabove, Pommier et al. teaches away from or would discourage the skilled artisan from using any kind of surface coating on the paper product since the properties of the surface of the paper are so important and central to the Pommier et al. invention.

The Karas et al. reference is directed solely to the provision of a degradable binder which may be used for coating or impregnating a fibrous web. Here again, the fibrous web is not a material which is molded as with the present case. Rather, a web is simply formed as in the process for making paper and the particular binder provided for by the Karas et al. invention can either coat the fibers of the web or simply act as a binder. Note particularly that a suitable synthetic fibers for the web include polyolefins, such a polyethylene and polypropylene (page 7, lines 10-29). Thus, the web of Karas et al is not necessarily biodegradable since such polyolefins are not biodegradable.

Nevertheless, regardless of the teaching of Karas et al., again the skilled artisan would find nothing therein which would suggest that a coating should be used on the paper of Pommier et al., particularly in light of the significance of the

surface requirements of the Pommier et al. invention. The application of a coating as disclosed in Karas et al. would essentially destroy the entire purpose of the Pommier et al. invention and accordingly, the attempted combination of these references are improper and this rejection should be withdrawn.

The rejection of Claims 60-64 as being unpatenable over the Tiefenbacher et al reference taken with Haas et al., should also be withdrawn. The examiner asserts that Tiefenbacher et al. shows the preparation of "rottable" shaped bodies by baking a starch containing mix and a mold and substantially conditioning it. The reference generally discloses that the bodies may contain fibers and kaolin and may have plastic layers. The reference does not teach the use of pre-formed substrates as recognized by the examiner.

However, in addition, Tiefenbacher et al is primarily directed to the production of thin walled bodies which are formed by baking in a mold and then conditioned. As pointed out beginning at column 1, lines 65-68, in the baking of such wafers, flour and water in major amounts are used. Also required as <u>essential ingredients</u> are leavening agents, fats and lecithin. The purpose of the fat is to facilitate the removal of the wafer from the baking mold, i.e., it acts as a release agent and the lecithin acts as an emulsifying agent and a release agent (see column 2, lines 1-19). However, as discussed at column 2, lines 33 and following, the leavening causes problems with respect to the distribution of the fat and produces a porous structure in the wafer as well as adversely affects the odor and taste of the wafers if they are to be edible. (see column 2, lines 33-column 3, line 37.)

Tiefenbacher et al solve these problems by replacing the fats with long chain fatty acids or polymethylhydrogensiloxanes. (see column 3, lines 38-50).

Clearly, the inclusion of such polysiloxanes would not produce a substantially completely biodegradable product. Moreover, the reference teaches that the composition may contain fibers which be plastic, glass, metal (column 4, lines 26-29). Most certainly, these materials would not provide a substantially completely biodegradable product.

The point here is that while the reference uses the term "rottable", it is nowhere defined in the disclosure. Indeed, in light of the possible components listed for inclusion in the composition, it is manifest that the invention is not directed to the provision of a substantially completely biodegradable body as is required by the present claims. In fact, the Tiefenbacher et al disclosure leads the skilled art worker away from a composition having such a property.

Furthermore, as the examiner points out, Tiefenbacher et al disclose that the shaped body may have a covering on one or two sides of a plastic, such as polyethylene or a plastic or natural product having rubber-elastic properties. Clearly, such materials would not be biodegradable and would result in a formed body which is not substantially completely biodegradable as specifically required by the present claims.

The examiner relies on the Haas et al reference as disclosing a cellulose acetate coating and concludes that it would be obvious to use such a coating on the formed body of Tiefenbacher et al. However, as noted above, Haas et al is not directed to a coating which is biodegradable. Moreover, Haas et al contain no information which makes Tiefenbacher more relevant to the presently claimed invention. Thus, one with skill in this art would find nothing in Haas et al to motivate them to strive to make a formed body as disclosed in Tiefenbacher et al substantially completely biodegradable and avoid the multitude of materials taught in

this reference as being suitable and which would clearly defeat the biodegradability of the resulting product. Accordingly, the rejection on this combination of references is also improper and should be withdrawn.

Finally, the rejection of claims 60-63 based on the combination of Tiefenbacher et al and Kharas et al should also be withdrawn. Each of these references has been discussed in detail hereinabove. Neither contains disclosure which would motivate the skilled artisan to combine them in the manner attempted by the examine. In fact, the only linking disclosure is that provided by the present application which, of course, is not available as a reference. Without the hindsight provided by the present application, no basis exists for combining these references and the rejection thereon is untenable and withdrawal is requested.

In view of the foregoing, it is submitted that this application is in condition for allowance and favorable reconsideration and prompt notice of allowance is earnestly requested.

Respectfully submitted,

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Marked-up copy of the amended claim 60:

--60. (Amended) A process for producing a substantially **[completed]** **completely** biodegradable molded body useful for packaging comprising:

a. Preparing a viscous mixture of a biodegradable fiber material composed of fibers or fiber bundles having fiber lengths or fiber bundle lengths within the range of 0.24 to 4.32 mm, water and starch;

b. Introducing the thus prepared mixture into a mold having a desired shape for the molded body;

c. Heating the mixture in the mold for a time period and at a temperature sufficient to bake the mixture into a cohesive mass having the desired shape; and

d. Applying a biodegradable, hydrophobic, softener-free, liquid impenetrable boundary layer to the thus obtained shaped cohesive mass.--

Add new claim 71:

--71. (New) The method of claim 60 wherein the mixture consists essentially of fibers or fiber bundles having fiber lengths or fiber bundle lengths within the range of 0.24 to 4.32 mm, water and starch.--